

CLAIMS:

1. A computing system aiding in the operation  
diagnostic and maintenance functions of a remote  
computing devices, the remote computing devices coupled  
5 to a network and running under a first boot image,  
the diagnostic system comprising:

a process initiator that allows for the selection  
of a particular remote computing device;

10 a download director, communicatively coupled to the  
user interface, that controls a download of a  
Maintenance boot image to the particular remote  
computing device via the network;

15 a first reboot director that initiates a first  
Reboot process of the particular remote computing device  
with the maintenance boot image;

20 a second reboot director that initiates a second  
reboot process of the particular remote computing device  
upon the occurrence of a predetermined event associated  
With the maintenance boot image prior to the second  
Reboot process and operating with the first boot image  
Subsequent to the second reboot process; and

the particular remote computing device performing  
diagnostic or maintenance functions under the  
maintenance boot image.

25 2. The system of claim 1, the process initiator  
Further selecting a specific operational mode of the  
Particular remote computing device.

30 3. The system of claim 2, wherein the selection of a  
specific operational mode results in a download of a  
particular new boot image from among a plurality of boot  
images.

4. The system of claim 3, wherein each of the plurality of boot images is operable to perform a particular maintenance or diagnostic task on the particular remote computing device.

5 5. The system of claim 3 wherein the plurality of boot images reside on a remote storage media.

6. The system of claim 1 further comprising an operation monitor, the operation monitor monitoring the particular remote computer for the occurrence of the predetermined  
10 event.

7. The system of claim 6 wherein the predetermined event is a signal from the particular remote computing device that a function associated with the operational mode associated with the maintenance boot image has been  
15 completed.

8. The system of claim 1 wherein the process initiator is a used interface, and an operator specifies the particular remote computing system.

9. The system of claim 1 wherein the process initiator  
20 is an independent diagnostic program, the independent diagnostic monitor initiating the selection of the particular remote computing device based upon specified criteria, the criteria of the remote system being monitored by the diagnostic program.

25 10. A method for diagnosing and maintaining remote computing devices the remote computing device coupled to a network and running under a first boot image, the method comprising:

selecting a particular remote computing device;  
30 downloading a maintenance boot image to the particular

remote computing device via the network;

initiating a first reboot process of the particular remote computing device with the maintenance boot image;

- 5 performing a diagnostic or maintenance function by running the particular remote computing device under the maintenance boot image; and

- 10 initiating a second reboot process of the Particular remote computing device upon the occurrence of a predetermined event associated with the maintenance boot Image.

11. The method of claim 10, the step of selecting comprising:

- 15 selecting a specific operational mode of the Particular remote computing device.

12. The method of claim 11, the step of selecting a specific operational mode resulting in downloading a particular new boot image from among a plurality of boot  
20 images.

13. The method of claim 12, wherein each of the plurality of boot images is operable to perform a particular maintenance or diagnostic task on the particular remote computing Device.

- 25 14. The method of claim 12 wherein the plurality of boot images reside on a remote storage media.

15. The method of claim 10 further comprising:

monitoring the particular remote computer for the occurrence of the predetermined event.